The Forest Management Market in China

February 2001

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February 2001

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THE FOREST MANAGEMENT MARKET IN CHINA

Team Canada Inc - Équipe Canada inc

EXECUTIVE SUMMARY

China has a relatively low rate of green coverage. The country's per capita forest coverage is only 0.11 hectares — one sixth of the world's average.

China attaches great importance to the development of its forest resources, but decades of logging with little regard for sustained forestry development has resulted in reduced yields, serious land erosion and other ecological problems. The 1998 flood disaster helped sensitize the Chinese people to the practical significance of forest and environmental management. As a result, the Government has implemented a series of measures and forestry programs.

While corrective actions are being taken, China's forest management practices still need to be further intensified to help the country achieve its development goals, including addressing complicated forestry issues in the country's poor and environmentally fragile regions. This holds significant potential for Canadian forestry companies.

Potential key growth areas in China's forestry industry include pest management, forest fire management and management of forested areas to ensure the survival of the trees, speed up afforestation, improve forest quality and maintain a sustainable ecological environment.

While strengthening the protection and rehabilitation of its natural forest resources, China is also actively exploring new modes of resources management.

Canada has a long-standing and multifaceted relationship with China in the area of forestry and forest management. The Chinese recognize Canada as having the know-how, expertise and technology in forestry management, wood products and wood processing equipment, biological control, and forest fire management. With numerous forestry projects planned over the next few years, Canadian companies will continue to be widely consulted by the Chinese for their forest management expertise.

In November 1998, a Memorandum of Understanding (MOU) between Natural Resources Canada and the China State Forestry Administration was signed. The Statement is intended to provide a framework for further bilateral collaboration in sustainable development and forestry technologies.

Canadian companies should be aware that China remains a complex, highly regional and frequently changing marketplace, making it imperative for them to seek Chinese partners to facilitate navigation of local regulations and expectations.

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THE FOREST MANAGEMENT MARKET IN CHINA

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MARKET OVERVIEW

China's Forestry Sector

Its importance notwithstanding, the forest resource base in China is small and isolated. Forest cover amounts to only 0.11 ha per capita, significantly below the world average of 0.77 ha per capita.

China's forestry industry has, however, made considerable achievements in the past two decades since the government became more open to foreign assistance. Its forestation coverage ratio rose from 12% to the current 16.5%.

Forestry is an important social and economic sector in China. The forests of China provide 40% of the country's rural energy, almost all of the lumber and panels for the nation's construction sector, and raw material for the pulp and paper industry. The sector is also a vital source of employment and income generation, supplying about 3% of the nation's jobs and 4% of the gross national product. According to the latest data, in 1997 China's forest sector employed over 2.5 million workers in silviculture, plantation, logging, and wood and non-wood product processing.

There are 136 state-owned forestry bureaus, 448 large- or medium-sized forestry product enterprises, more than 4200 state-owned forest farms, over 2100 state-owned nurseries, 550 forest and wildlife nature reserves, nearly 700 forest parks and over 150 000 forest farms at the township and village levels.

Forest Cover

China's forests cover 158.9 million ha, or 16.5% of total land area, and the Government aims to increase this to 19.4% by 2010.

Forest lands in China are divided into two categories: approximately 87 million hectares of natural forests, principally located in relatively remote and poor regions in the northeast and southwest, and about 34 million hectares of plantations (artificial afforestation). Mature stands of timber are becoming increasingly scarce, making it difficult to meet the annual wood supply deficit. Few harvested trees exceed 30 cm in diameter.

Table 1. Forest Area in China, 1998-2000

	1998	1999	2000
Total Land Area (million hectares)	960	960	960
Total Forest Area (million hectares)	128	134	135
Commercial ('000 hectares)	84 920	72 189	67 943
— tropical hardwood ('000 hectares)	1 662	1 413	1 330
— temperate hardwood ('000 hectares)	31 169	26 493	24 935
— softwood ('000 hectares)	52 098	44 283	41 678
Forest Type			
— virgin ('000 hectares)	14 000	13 600	13 200
— plantation ('000 hectares)	41 390	42 530	42 644
— other commercial, regrowth ('000 hectares)	13 780	14 056	14 337
Total volume of standing timber ('000 m^3)	1 073 563	1 105 770	1 138 943
— commercial timber ('000 m^3)	674 339	694 569	715 406
Annual timber removal ('000 m^3)	236 000	228 000	219 000
Annual timber growth rate ('000 m^3)	362 000	405 100	432 400
Annual allowable cut ('000 m^3)	226 000	192 100	18 080 000

Source: Bean, Ralph. *China, People's Republic of Forest Products, Annual Report: 1999,* GAIN Report, U.S. Department of Agriculture.

China's ecosystem closely resembles Canada's, with vast stretches of pine forests. There are 27 dominant tree species in China. See **Appendix A** for an extended list of wood species and their distribution. The following are the five most common

Table 2. Main Tree Species and Distribution in China

Species	Area (million ha)	Growing Stock (million m^3)	Distribution
Masson pine (*Pinus masspniana Lamb.*)	14.24	485.56	South of the Huaithe River & the Qin Ling Mountain
Oak (*Quercus*)	11.87	812.97	Northeast, north & southwest
Larch (*Larix*)	9.96	1000.2	Northeast, north & southwest
Chinese fir (*Cunninghamia lanceolata Hook.*)	6.07	237.33	South of the Huaithe River & the Qin Mountain
Yunnan pine (*Pinus yunnanensis Franch*)	5.78	431.76	Southwest

Source: China: *Forestry and the Wood Products Industry,* World Forestry Center, September 1998.

Forest Ownership

Technically, the Chinese government owns all land. In practice, there are three types of forest land ownership: state-owned (run by state forest bureaus), collective-owned and individually responsible land.

In the last five years, the main wood production area has shifted from the state-owned forest regions in the north to collective-owned forestry farms in the south. It is reported that 40.8% of China's forest land is today controlled by the state government, 49.2% are collective forests and about 10% are individual and co-operative forests. Individuals and businesses can lease forest land, giving them the right to utilize the forest. However, private forests make up a very small proportion of China's forest resources.

Forest Management

Poor forest management has long been one of the major factors contributing to China's dwindling cover. Poor management practices included timber poaching, high-yield industrial logging, lack of fire and disease control, and indiscriminate conversion of forest land for agriculture and human settlement projects.

China's approach to forest development has evolved over the past 20 years from relatively simple, ad hoc projects to a more complex strategy. In the 1980s, the country focussed on aggressive reforestation and afforestation programs. Recent efforts, however, exhibit a strategy that embraces a wide range of development goals, including sustainable development and biodiversity protection.

Regional Overview

China's three major forest areas are the northeastern (Heilongjiang, Jilin and eastern Inner Mongolia), southwestern (Sichua, Yunnan, Tibet and small part of Gansu, Xingjiang and Shaanxi), and southern regions (region south of the Changjiang River, including Fujian, Hunan, Hubei, Jiangxi, Zhejiang Hainan, Guizhou, Guangxi, Guangdong, part of Sichuan and Yunnan, and southern Anhui and Jiangsu). These three main wood producing areas account for 90% of China's total growing stock — representing a total forest area of 101 million hectares, with a growing stock of 8.14 billion cubic metres.

Since each province or area has its own distinct natural characteristics, development plans and forest resource administration vary across districts. For example, some forest lands are closed to allow reforestation efforts, while others are managed for agricultural crops.

The following presents an overview of China's forest regions.

Northeast Timber Base

The northeastern region holds 100 tree species, including 30 commercial species. The northeast area is similar to the northwest United States, known for its Korean pine, larch, cedar, red pine, elm, chestnut and Mongolia oak. Trees mature at ages above 100 years. The trees in this region may be hundreds of years old, but the high altitude and severe weather (there are only 105-110 frost-free days per year) significantly constrain wood growth. Logging and fire roads are few and far between. In Heilongjiang, China's most important forestry province — ranking first in forest cover and growing stock — the Forestry Bureau supports no more than 4700 km of narrow railway lines throughout the entire province. Cutting may begin as soon as summer arrives, but the bulk of the work is done in the winter as damage to the timber — due to moisture, rain or variations in humidity — is far less likely to occur in winter temperatures of -30°C to -40°C.

South and Southwest Timber Base

Both the southwestern and southern areas produce small amounts of tropical hardwood, and a wide variety of softwood and temperate hardwood. The southwestern area varies in altitude from about 100 m to 4000 m above sea level and is undeveloped, with poor road conditions, low living standards and a sparse population. The southwestern region has the most diverse species mix: from tropical hardwoods found near the Burmese and Thai borders, to alpine varieties of cedar, fir and pine in the western highlands of Sichuan. These stands play a small role in China's forestry economy as transportation networks inside and outside of the provinces remain underdeveloped.

The southern region is endowed with favourable natural conditions and is rich in forest resources. It is a traditional timber-producing area with an annual output second only to the northeastern national forest area. The forests of the south are highly diverse, but the main plantation species are Chinese fir, Masson pine, Bamboo, Huangshan pine, Yunnan pine, Nanmu, Maple, Sassafras, Yung tree, Camelliam, oil-tea Camellia, and Slash or Loblolly pine introduced from the United States. Recently, Guangxi and Fujian provinces have been investing in developing faster-growing species, especially Eucalyptus and Slash pine for the pulp industry.

Key Factors Shaping Market Growth

Forestry and the Economy

After years of effort, the Chinese forest industry has developed from the unitary form of timber production into a diversified forest economy, covering afforestation, forest

management, timber production, wood processing, the forest chemical industry, forestry machinery, forest by-products development and forest tourism. The country's forest output value totalled $48.9 billion[1] (272.9 billion yuan) in 1998.

Forestry is particularly important in the local economies of northeastern and southwestern China, where the output value of forest industries has been in the order $7 billion annually since the mid-1980s, accounting for about 1% of China's total industrial output value.

Timber Consumption

China is the third-largest consumer of timber in the world and faces a worsening imbalance between supply and demand for wood products. The present consumption level (about 300 million cubic metres of roundwood) exceeds the annual growth increment of the local forests and total imports[2] by about 50 million cubic metres per year. As a result, about 500 000 ha of forest area are lost each year, causing increased soil erosion, serious deterioration of the plant and wildlife habitat, and other environmental degradation, such as declining levels of carbon sequestration.

In 1998, the Government imposed a logging ban to save China's natural forests. Thereafter, choosing to increase domestic supply rather than to increase imports, China embarked on an ambitious program to massively enlarge its forest cover, mainly through the establishment of artificial plantations. Hence, with the rise in the area planted to artificial plantations, there is reason to believe that China will continue to require expertise and assistance in the area of forest management.

Growing Importance of Forest Regeneration

Afforestation

Expanding afforestation efforts is still a primary task for China's forestry departments. Figures released by the State Forestry Administration[3] (SFA) show that China's planted forest storage stands at 1.01 billion cubic metres, ranking first in the world. From 1994 to 1998, the acreage of planted forests increased by over 10 million hectares, a rise of

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[1] All monetary amounts are expressed in Canadian dollars, unless otherwise indicated. The conversion rate to Canadian dollars is based on IDD Information Services, *Tradeline*, September 2000.

[2] One third of China's wood consumption is met by imports. In 1998, for the first time, the import value of wood superseded the import value of petroleum and steel products. The most commonly imported items include logs, sawn timber and plywood.

[3] For contact information regarding key organizations mentioned in this report, see **Key Contacts and Support Services**.

more than two million hectares annually and accounting for 74.8% of the total forest acreage growth.

China is expected to continue building key afforestation projects, particularly focussing in the middle and upper reaches of the Yangtze and Yellow rivers. For example, it has been reported that the Chinese government, blaming logging for increased flooding, drew up a $3.4 billion (US$2.3 billion) forest conservation project in September 1998 and ordered an end to all logging along the upper and middle reaches of Yangtze and Yellow rivers. A 10-year afforestation project, covering areas of Sichuan, Yunnan, Guizhou, Tibet and Guangxi in southwest China, was launched in 1999 to protect the upper Yangtze and Zhujiang rivers. Logging has also been recently banned in the last remaining area of primeval forest in northeast China, an area north of the Greater Xingan range in Inner Mongolia.

Raising the quality and design of forests and spreading drought-defying technology have become focal points in the work of afforestation. According to the SFA, forestry authorities plan to popularize 100 ways of replanting western China to preserve its trees and grasses while the nation develops the largely barren and infertile region. China is also expected to increase the use of new science and reforestation methods, such as dune fortification and different ways of configuring trees and grasses.

Guided by the strategy of promoting afforestation through the application of science and technology, the Chinese government has also promulgated a series of afforestation technology regulations and set up scientific and technological systems, information networks for scientific research, and extended technological supervision, thus promoting the advanced scientific and technological achievements and practical technology to improve the quality of forest planting and breeding.

Commercial Plantations

In anticipation of imminent shortages of timber, the Government has emphasized the development of several commercial forest plantations in suitable provinces.

The species used in plantations vary according to the region. In the northeastern provinces of Heilongjiang, Jilin and Liaoning, the main species for afforestation are *Larix, Pinus sylvestris var mongolica, P. Koraiensis, Populus and Fraxinus mandshurica*; in the north and central plains region (Shandong, Hebei and Henan provinces) *Populus, Paulownia, and Ulmus pumila L.* are used; while plantations in the southern provinces (from Fujian across to Yunnan and Sichuan) are dominated by *Cunninghamia lanceolata, Pinus massoniana, P. elliottii , P. Taeda, Acacia and Eucalyptus*.

Challenges in China's Forestry Sector

China's efforts within the forestry sector has evolved markedly over time, contributing initially to meeting China's forest cover goals, but then gradually addressing complicated issues in China's poor and environmentally fragile regions. Despite these strengths, serious challenges still face China's forestry industry. Some of these challenges include:

- Scientific and technological advances have yet to be applied in a concerted and wide-spread manner throughout China;
- Slow forestry industrialization and adjustment of forest products mix (forest products are mainly primary products, e.g. logs) — the diversification of forestry management has not yet taken shape, wood processing technology still lags behind, and timber production does not grow in compliance with market development);
- Low levels of researcher training;
- Lack of funding stability from year to year: central government investment is somewhat limited, and local government funding is insufficient;
- Local engineering practices are considered to be of poor quality and slow; and
- afforested stands, particularly monoculture stands, are more susceptible than natural forests to problems such as serious diseases and insect harm, deteriorated land productivity, acidified soil, and poor tree growth.[4]

China's Tenth Five-Year Plan on Forestry Development

According to the Tenth Five-Year Plan (2001-2005) on forestry, China will plant 11.5 million hectares of new forests to bring the forest coverage to around 18%, while the annual output value of the forest industry will reach $89 billion (500 billion yuan). Forestry work in thisperiod will focus on:

- Constructing 10 major ecological projects in the upper reaches of Yangtze River and the upper and middle reaches of the Yellow River;
- Developing economic forest production bases to readjust and upgrade the structure of the forest industry;

[4] The growing stock of planted forests in China is only 33.3m ^{3}/ha, far less than the average values of 83.6m^3/ha in developed countries.

- Building and improving upon existing infrastructure; and
- Raising the technological content of the industry.

Government Strategies, Policies and Programs

Over the past 20 years, the Chinese government has paid increasing attention to environmental protection, replacing the logging-oriented operation of forestry departments with diversified management. Accordingly, the Government has formulated several programs aimed at improving the state of its forests. The main objectives of some of these programs include strengthening breeding; protection and management of forest resources; enlarging forest areas and improving the forest quality; plantation of large-scale shelter forests; implementation of ecosystem improvement programs; and compulsory afforestation activities through nationwide tree planting and territory greening programs.

Natural Forest Conservation Program

Prompted by the severe floods in the reaches of the Yangtze River in August 1998, the importance of protecting natural forests has now been clearly recognized by the Government and the Chinese people. Consequently, the newly established Natural Forest Conservation Program (NFCP) aims at protecting natural forests in the upper and middle reaches of the Yangtze from further cutting.

The NFCP has set out plans to protect over 95 million hectares of natural forest (which are mostly managed by the state) by 2010, while at the same time encouraging a dramatic increase in private-sector investment in plantations. A target for reforestation, either through natural regeneration or artificial planting has also been set at 31 million hectares. As the source of timber supply shifts from natural forests to planted forests, the private sector will become a growing force in the sector.

National Ecological Environment Construction Planning

In 1999, the Chinese government also initiated a broad scheme to significantly improve the ecological environment in most parts of the country. The major component of National Ecological Environment Construction Planning (NEECP) relates to projects of forest reconstruction, which include strengthening protective forest plantation and enhancing speed and quality of plantation. This program is set to be developed over the next 50 years and will rely heavily on science and technology to improve local techniques. The following presents some of the main objectives of NEECP:

- short-term objectives (2000-2010) are to reclaim a total of 22 million ha of sandy land, plant trees in an area of 6.7 million ha of sloping land, return 5 million ha of

farmlands to woodlands, increase the forest cover area by 39 million ha, and reach a forest coverage rate of 19%.

- mid-term objectives (2011-2030) are to reclaim 40 million ha of sandy land and increase 46 million hectares forest cover. By then, the forest coverage rate is expected to reach 24% and the area of natural reserves will take 12% of the total land area of China.

- long-term objectives (2031-2050) are to establish virtuous ecological environmental systems. The Government will be aggressively uniting its efforts to increase and keep the forest coverage rate at 26%, rationalize the structure of forest varieties and tree species, improve the national ecological environment through better water and soil erosion management, and establish an ecological system of sustainable development.

China's Western Development Strategy

In January 2000, China formally launched the Western Development Strategy (WDS). This initiative aims to counter the growing wealth gap between the rich coastal areas and the poorer, relatively underdeveloped, western provinces.

The Western Region consists of 10 provinces, with a population of 286 million accounting for 23% of China's total population. Land coverage is 5.56 million km^2 or 56% of China's total land area. Most of the region is mountainous with large deserts and plateaus.

The west is, relative to the rest of China, under-developed and faces many difficulties: lack of infrastructure, low levels of investment, a poorly educated populace and subsequently a shortage of qualified people for industry and administration, a worsening environment, weak ecosystem, and a large population struggling against poverty.

According to a recent World Bank report on poverty in China, a large share of China's absolute poor are located in the remote upland areas where agricultural land is extremely poor and forest resources are the only significant productive asset at their disposal. Consequently, the development of the forest sector is seen a key element in the Government's strategy to reduce poverty.

The Chinese government has set five key points for its WDS:

1. Strengthen infrastructure development;
2. Strengthen environmental protection and ecosystem construction practices;
3. Adjust industrial structure;
4. Upgrade of education, science and technology; and

5. Investment attraction.

According to the SFA, under this WDS, special attention will be paid to water conservation and the protection of the environment, including local forests. Preferential policies for afforestation activities will also be introduced by the central government to attract foreign investment. Canada is well-positioned to participate in the economic development of the Western Region.

The SFA will play a key role as a lead agency in the planning and co-ordination of environmental projects under the WDS. However, it has been reported that SFA will no longer consider the development of commercial forests as its number one priority in western China. Instead, protection of the environment will be its main focus. The SFA's two main tasks will be:

- the preservation of existing forest cover and reforestation of sloping lands in the upper reaches of the Yangzi River and Yellow River (above the Xiaolongdi), and
- the restoration of forests to assist environmental amelioration and water conservation in 13 western provinces.

According to the SFA, there are other potential projects in the poor Western region where Canadian technology, expertise, equipment and training would be welcomed. More specifically, the development of efficient, high-quality seedling nurseries capable of producing high-quality, fast-growing species appropriate to the local environment has been identified as a key priority. Improved management techniques for forests and training are also necessary.

Forestry Funding

International forest-sector lending to China has been growing for over a decade. For example, over the past 15 years, China has implemented six World Bank (WB) financed forestry projects, with loans of more than $1 billion (US$840 million). Furthermore, it is expected that the WB, along with other international financial institutions will continue to finance forestry projects and help improve the management efficiency of China's forests. However, it has been reported that funding will no longer be geared toward the development of commercial forests. Instead, as with China's WDS, protection of the environment will be its main focus (e.g. preservation of existing forest cover and restoration of forests).

In addition to the large financial contributions coming from the WB and the China Development Bank, the Chinese government is spending an ever-increasing share of its fund reserve on forest-management projects. For example, the central government increased funding for forest-conservation projects from $83 million to $116 million

(500-700 million yuan) in 1997 to $540 million (three billion yuan) in 1998 and $1.3 billion (seven billion yuan) in 1999.

There is no doubt that the increasing attention by the Government to the sustainability of China's forests will propel China's need for modernization and forestry-management efforts well into the foreseeable future.

Forest Fire

China suffers from frequent forest fires. From the founding of New China until 1987, an average of 15 800 forest fires damaged a total forest area of 940 000 ha per year. In 1998, the total number of forest fires that occurred in China was 4455 and the total forested area damaged amounted to 27 424 ha Compared with 1997, the number of the fires increased by 80.7%.

Although the number of forest fires in the northeast accounts for just 5% of all forest fires in China, these fires cause as much as 60% of national forest losses due to fire. In contrast, the south and southwestern regions had 95% of the fires, but just 40% of total annual fire losses. The fire seasons peak in May and October in the northeast, while in the southwest, the peak fire season is from January to April. Across China, more than 95% of forest fires are caused by humans. In the northeastern forest regions, however, lightning strikes account for up to 30% of fires.

The great Daxinganling fire of May 1987 became a catalyst for improving management of forest fires in China, providing many lessons in forest fire awareness and law enforcement. Fire-prevention technology in China has since been improved, as has the integration of administrative management systems at all levels of government. A great deal of labour, material resources and funds have also been put into China's fire control work.

Today, forest fire prevention and control institutions have been established in all municipalities, autonomous regions and provinces. Moreover, several forest protection and fire control organizations have been set up, and 100 000 professional and semi-professional forest firefighters are stationed at the Forest Aerial Protection Centre and in the General Forest Aerial Protection Station in the state forest areas of northeastern and southwestern China. Together, these units are engaged in forest protection and forest fire control.

Vertical observation networks consisting of satellite monitoring, aerial inspection and ground guarding systems have already been set up in all major forest areas of China. Advanced equipment and techniques are also being integrated for fire extinguishment and control. Approximately 439 000 km of fire breaks and 6606 fire watch towers have been built nationwide. There are about 47 000 special communication facilities and 16 000 vehicles devoted to fire prevention and control. The use of satellite remote sensing

monitoring and satellite communications have also successfully resulted in earlier fire detection and initiation of firefighting activities.

Forest Fire Administrative System

The Forest Fire Management Office (FFMO) of China's SFA manages forest fire activities nationwide. The FFMO is responsible for monitoring and analyzing national fire trends, predicting fire risks, conducting information programs and managing ground and aerial forest fire detection. Fire headquarters established by local governments are responsible for fire prevention, firefighting and co-ordination on a local level.

The headquarters for a division of China's armed police force specially trained to fight forest fires was established in Beijing in August 1999.[5] The "forest police" shoulder the responsibility of preventing and extinguishing forest fires, as well as protecting forest resources.

Representatives of the forest police are mainly stationed in northeast China's Heilongjiang and Jilin provinces, the Inner Mongolia Autonomous Region and southwest China's Yunnan Province to safeguard more than 37 million hectares of forest and 22 million hectares of grassland.

Ground attack is currently the main firefighting practice in China, employing tools such as shovels, fire flats, wind extinguishers, backpumps, engines and similar equipment. Helicopters are sometimes used to attack fires with water drops. Firebreaks also play an important role in the forest regions of southern China.

China's forest fire police are now working with more sophisticated tools and equipment, including satellite monitoring systems, maritime satellite phones and global positioning systems.

Pest Management

Pest invasions and forest diseases have long been a serious concern for China's forest industry. Statistics show that the area affected by forest pests increases by 100% each decade in China. In 1996, there were 6.6 million hectares of forest areas suffering from disease and pest invasions. In 1998, more than 400 million trees accounting for 6% of the annual forestation area died due to insects and pests.

There are about 1500 varieties of forest diseases in China, of which 60 are the most serious. One of the major deadly tree diseases is the *poplar canker.* In addition, there are over 5000 kinds of forest insects, of which about 100 kinds cause the most damage

[5] Although functional for 50 years, the forestry police did not have a headquarters until now.

to the forest. The major insects are pine moths, wood moths, American white moths and termites.

Historically, pest disasters in China's forests have not been effectively controlled. As a result, insect attacks on China's forests have been spreading. In the first half of 2000, forests in Shandong experienced their worst attack by insects in more than 10 years, with vast numbers of trees damaged by insects.

In central and northern China, outbreaks of pinewood nematodes and gypsy moths are also frequently reported. According to SFA officials, the Chinese government has already spent a record $1.4 million (eight million yuan) to prevent and control the plant and tree predators. Half of the funds are earmarked for the control of the massive gypsy moths reported in the north, the other half is for exterminating pinewood nematodes rapidly spreading in the south.

The attack against forest pests is often referred to the war against "smokeless forest fire." Experts attribute the pest outbreaks to insufficient development of China's forests. Concentration on a single type of tree in one area means there are few barriers to prevent the pests spreading and few natural enemies to deal with them. The persistent drought in the north and northwest has also contributed to the massive increase in pests.

While putting too much stress on afforestation, particularly to earn money by planting high value-added trees, regions have had poor awareness of effective pest-control management practices. However, since the 1980s, forest pest and disease control in China's forests has risen to a new stage, as the General Administration of Forest Pest and Disease Control was set-up by the SFA. As well, the number of forest pest and disease control stations at provincial, prefectural and county levels has increased from 1500 in 1987 to the present 2599 with more than 13 000 professionals.

China mainly uses environmentally harmful and unhealthy pesticides. Over the last few years, China has been increasing its imports of chemical products, including insecticides and herbicides. Experts are predicting that China is likely to face continued widespread pest plagues in its forests. This will undoubtably lead to an increased demand for efficient products and expertise.

Table 3. Imports of Agricultural Chemicals Products in China, 1997-1999 ($ millions)

HS Code		1997	1998	1999
HS 3808	Insect., rodent and fungus kll	229.8	276.9	358.5
HS 3808.30	Herbicides	134.0	173.4	196.5
HS 3808.10	Insecticides	47.8	49.9	93.7

Source: *TradeStat*, 2000

Canada-China Co-operation Agreement in the Field of Forestry

The Chinese government's recent policy reforms are opening up opportunities for international collaboration and increased trade. In November 1998, a Memorandum of Understanding (MOU) between Natural Resources Canada and China's SFA has set the stage for increased and more focussed Canada-China collaboration in the forest sector. The objective of the MOU is to create a mutually beneficial bilateral relationship in the forest sector.

This MOU has helped both countries forge more scientific, technical and trade relations in the area of forestry and forest management. The MOU is intended to provide a framework for further bilateral collaboration in sustainable development and forestry technologies. Programs and activities include cooperation in areas of mutual interest including forest research, technical cooperation, training and fostering forest sector trade and investment.

On January 25, 2000 China and Canada agreed to increase co-operation in pursuit of better ways to administer forestry from both economic and environmental perspectives.

More recently, on July 11, 2000, a delegation of 22 national and provincial senior forest fire managers from China concluded a successful one-month Forest Fire Management Training Program in Canada. The training program, which dealt with all aspects of fire management, from prediction, to detection and control, exposed participants to a wide range of Canada's world leading fire management technology, tools and equipment. Proposals are currently under development to determine the next steps.

Opportunities

China is expected to continue to be the world's biggest market for forestry development. The expansion of China's forestry cover, including the implementation of several afforestation projects, coupled with the government's rising concern over the ecology and the environment presents a good opportunity for Canadian industry to showcase its advanced technology and capabilities.

Particular segments of the forestry industry where commercial potential is thought to exist are:

Pest Management Systems

- efficient pest-control delivery systems, such as spraying programs;
- forest insecticides;
- chemicals, bio-chemicals and fertilizers, particularly "tree friendly" chemical pesticides[6];
- effective biological control[7] program for arthropods such as the mealybug (*Oracella acuta*). China is intensifying its efforts to reduce the use of higher risk and toxic pesticides and to promote Integrated Pest Management, including biological and cultural control systems

Opportunities also exist in the area of forest fire management, including the provision of control equipment and technological expertise such as:

- fire management systems;
- training tools;
- fire-fighting products (e.g. portable pumps, hoses, water conveyances, protective clothing, etc..)
- geographical information systems including digitized maps;
- global positioning systems;
- remote monitoring systems[8];
- computer network technology and digital transmission technology;
- research (both quantitative and qualitative) on the mechanisms of action of firebreaks.

[6] At present, sales of "environmentally safe" insecticides account for 4% of the local market. It is estimated that this will increase to 10-15%.

[7] Biological control (Bt) agents are live natural enemies — parasites, predators and pathogens — used to reduce population levels of pest species. Natural enemies reduce the population of hosts; in turn, host abundance influences the population levels of natural enemies. Biological control is a more environmentally compatible method of managing pests of economic and environmental importance than chemical pesticides, which can be toxic to a broader spectrum of nontarget organisms, threaten groundwater quality, contaminate foodstuffs, and contribute to the development of pesticide-resistant pests.

[8] The monitoring capability of satellite remote sensing is becoming increasingly valuable in China, and is expected to play an increasingly important role in fire detection. Remote sensing equipment is widely applied in daily monitoring and fire information management in the SFA and key forest regions.

Forest Management

In spite of the various improvements over the last few years in China's forestry sector, modern, integrated, intensive forest-management techniques are still needed in the country's large state forestry bureaus. Local systems of resource monitoring, silviculture, research and development, data handling, and integrated management are seriously out-dated for the new challenges of forest management. Other areas where China is expected to continue to seek co-operation with foreign firms include:

- protected area management, focussing on new management and conservation techniques;
- appraisal of sites and development of afforestation designs;
- development and dissemination of improved silvicultural technologies that would raise the productivity of forest resources on steeper, higher elevation sites;
- afforestation techniques;
- improved environmental management of ecologically fragile mountainous watersheds, including reduced soil erosion, flooding, and river sedimentation, and preservation of biodiversity;
- scientific management of forested areas to ensure the survival of the trees;
- quality control/M&E of afforested areas; and
- forest management inventory (multi-resource/regeneration/logging/industrial plantation inventory).

International consultants might also be hired to assist with feasibility studies and implementation activities.

Forestry/Agricultural Machinery and Equipment

China relies heavily on imports of forestry equipment because local production is too small to meet demand. Canadian firms might find that a few opportunities exist in the area of forestry machinery/equipment, such as:

- irrigating equipment;
- sprinkling equipment;
- spray equipment;
- purgative equipment; and
- process control systems.

Finally, China's State Forestry Bureau has announced areas where foreign investment in encouraged, banned or restricted.

Areas where foreign investment is *encouraged* include:

- importing of fine varieties of trees;

- construction of sapling nurseries;
- improvement of low- and medium-yielding forests;
- forest cultivation and afforestation;
- forestry chemical products and new technologies and products for comprehensive utilization of low-quality, secondary and young firewood forests;
- development, storage, fresh-keeping and processing of high-quality forest by-products;
- forestry machinery; and
- forest pesticides.

Areas where foreign investment is *restricted* include:

- log processing and exporting precious species of trees (wholly owned projects are not allowed);
- logging of Tung trees[9] and production of sawn Tung boards; and
- production of primary rosin products.

Areas where foreign investment is *banned* include:

- development of resources of endangered precious species of plants;
- construction of natural reserves; and
- processing of green tea and other special varieties of tea products.

The State Forestry Bureau has indicated that priority will be given to market-oriented, highly efficient and environmentally friendly projects.

Actual and Planned Projects

Canadian forestry firms and service providers stand to benefit from China's continuing forest programs. There are numerous new and existing forestry projects under way. There are also many forestry projects in the preparation stage and planned for the next few years. **Appendix B** highlights some forestry projects in China that may present some opportunities for Canadian firms.

The main opportunities for Canadian companies in the area of forestry management in China are through international financial institution-funded projects. Exporters can access IFI information at: http://www.dfait-maeci.gc.ca/ifinet/menu-e.asp.

Canadian companies are also strongly encouraged to follow the developments of the Canada-China MOU in the field of forestry for possible connections and upcoming projects in China. For example, the next MOU Joint Management Committee meeting is

[9] small Asian tree of the spurge family (Euphorbiaceae), commercially valuable for tung oil.

planned for early 2001 and will likely have an activity wherein Canadian expertise, goods and services can be highlighted for the Chinese participants.

COMPETITIVE ENVIRONMENT

Local Capabilities

Local forestry firms, while often not possessing the most advanced technology, can often compete effectively on price. It is, therefore, important for Canadian exporters tc demonstrate to potential customers how the additional features of a given technology will allow the customer to better meet forest practices and sales.

Xi'an Zhong Fu Enterprises Group represents one of China's largest private-sector companies active in the forestry sector. The company runs and operates forest plantations and a large-scale seedling nursery in the Xi'an area in Shaanxi Province (Xi'an is the capital of Shaanxi and is expected to be a major centre for activity under the WDS). Zhong Fu's customers for tree seedlings are primarily central and local government agencies looking for high-quality, fast-growing seedlings for use in reforestation.

Jinggu Corporation represents another large Chinese forestry company. The company is located in the south-western portion of the Simao District of Yunnan Province. The Jinggu Corporation is engaged in timber cutting and transportation, forestry management, the production of construction materials, sustainable forest management, as well as the manufacture of chemical forestry products and manufactured boards.

Forest Research Institutes and Education

There are 247 forestry research institutes in China, with 81 research sections set up in forestry colleges and universities. There are over 1600 forestry technical extension stations above the county level over the whole country, with 180 000 people engaged in forest technical extension education.

The Chinese government invests significantly in forestry education. More than 17 000 students graduate from these universities and schools annually. There are 11 universities and 34 forestry colleges for higher education, 27 forestry departments in agricultural universities and colleges, 59 forestry technical schools. Eleven units have been authorized to confer Master's degrees and 27 units to confer doctoral degrees.

The Chinese Academy of Forestry (CAF) is China's central research institute of forestry. As a national forestry research centre, the CAF has carried out more than 40% of the key national forestry research projects in co-operation with professional universities and local research organizations.

International Competition

Globalization of forestry markets has increased the competition in China's forest management sector. Changes in traditional forestry practices are creating opportunities for foreign companies, but also providing challenges.

China has undertaken scientific exchanges and economic co-operation in the field of forestry with dozens of international organization and Non-Governmental Organizations (NG0s). The forestry exchanges and co-operation involve many aspects such as biological engineering, afforestation and silviculture, resource inventory, forest fire control, forest pests and disease control, management of wild animals and natural reserves, forest industry, forest economics, legal and scientific policies, and technology and education.

China is currently involved in international collaboration projects with German, Japanese, Korean, Australian, and Swiss institutes, agencies and organizations. German companies have been particularly active in the area of forest management and afforestation in China.

China's forest fire management community has also long been reinforcing its capabilities through international exchange and co-operation programs focussing on technology and experience. To date, the FFMO of SFA have visited 15 countries, including Canada, Russia and the United States to observe forest fire management and aerial forest protection technologies.

The Chinese government has also signed agreements on joint forest fire prevention in border areas with Russia and Mongolia in 1995 and 1999 to strengthen forest fire prevention co-operation. The Chinese SFA is reinforcing technical exchanges on forest fire management and research, and is conducting training programs for technical staff in Canada.

In the area of pest control, several international forest service units are currently working closely with China in a reciprocal agreement to control the mealy bug (*Oricella*), which is attacking Southern Longleaf Pine in the southeastern region of China.

Pesticide technology is a high-technology industry seriously pursued only by the United States, Japan, Germany, and Switzerland.

Canadian Position

Canada has a long-standing and multifaceted relationship with China in the area of forestry and forest management. In the past two decades Canadian firms have played an increasingly important role in the sustainable development of China's forests. Many private-sector links for Canadian forestry companies have come about through the

Canadian International Development Agency (CIDA)[10]. Other partnerships have developed through various "twinning" programs between Canadian and Chinese municipalities, or through Canadian Studies Centres.

The Chinese recognize Canada as having the know-how, expertise and technology in forestry management, wood products and wood processing equipment. Canadians companies have been widely consulted by the Chinese for their fire management expertise.

According to Industry Canada's latest trade statistics, Canadian exports of forestry services to China amounted to $41,352 in 1995 and $13,526 in 1996.

Several Canadian forestry research organizations also have a long history in China in the field of forestry. Some of these organizations include Forintek Canada Corp. (Vancouver), Canada's research and development organization specializing in solid wood products, and FERIC (Forest Engineering Research Institute of Canada). Moreover, both formal and informal scientific exchanges are currently ongoing between NRcan/CFS and Chinese researchers in the area of forest management.

Canada is not a proponent of the use of forestry chemicals, thus has not been considered a major supplier of chemical pesticides and insecticides products to China. Given that China's insecticides and pesticides market is well penetrated by international competitors, most opportunities for Canadian companies will involve the supply of more "low toxicity" products, such as biological controls (Bt) to control forest defoliators. Canada is considered as a leader in this field.

Competitive Advantage through Canadian Government Policies and Initiatives

Canadian International Development Agency Industrial Co-operation Program

Since 1982, the Canadian International Development Agency's Industrial Co-operation Program (CIDA-Inc) has been actively promoting Canadian participation in China's socio-economic development. CIDA-Inc offers cost-sharing services, for feasibility studies, project development and project implementation, to companies considering investing in China through joint-venture arrangements or wholly owned ventures. CIDA-Inc's interests are mostly in projects involving social impact enhancement.

[10] For example, in 1985, CIDA projects were established in fire management (Jiagedaqi Forestry Bureau of Inner Mongolia) and integrated forest management (Langxiang Forestry Bureau of Heilongjiang). CIDA provided funds for modern equipment, Canadian technologists in the field, and educational opportunities for many young Chinese foresters. The technologies and fire equipment introduced through this program have significantly improved local firefighting management and technology, and established a model for use in other local fire-management centers.

Export Development Corporation

Export Development Corporation (EDC) is Canada's official export credit agency, facilitating Canadian trade with over 200 world markets. EDC's first transaction with China took place in 1980 and since this time EDC customers -- Canadian companies of all sizes -- have concluded over $5 billion of business in China. A variety of EDC trade finance services have been employed in the China market. Financing is traditionally offered on a case-by-case through lines of credit established with select Chinese banks. Export financing may also be considered via direct buyer loans to creditworthy companies which have Chinese government authority to borrow funds abroad. In addition, EDC export and investment insurance programs provide exporters with protection against a variety of risk, both commercial and political. Performance security and contract bonding programs also help exporters by providing exporters with the ability to free up working capital while meeting bonding requirements during the execution of commercial contracts.

Canadian Commercial Corporation

The Canadian Commercial Corporation (CCC) gives Canadian companies access to financing and better payment terms under the Progress Payment Program (PPP). The PPP concept was developed as a partnership between major Canadian financial institutions and the CCC. It enables the exporter's bank to open a project line of credit for the exporter's benefit, based on CCC approval of the project and the exporter's ability to perform. The CCC will also act as a prime contractor on behalf of Canadian small and medium-sized enterprises, giving those businesses increased credibility and competitive advantage.

Program for Export Market Development

The Program for Export Market Development (PEMD) helps Canadian companies enter new markets by sharing the costs of activities that companies normally could not or would not undertake alone, thereby reducing risks involved in entering a foreign market. Eligible costs and activities include market visits, trade fairs, incoming buyers, product testing for market certification, legal fees for international marketing agreements, transportation costs of offshore company trainees, product demonstration costs, promotional materials, and other costs necessary to execute a market development plan. Activity costs are shared on a pre-approved, 50/50 basis.

The PEMD refundable contribution ranges from $5,000 to a maximum of $50,000. Preference is given to companies with fewer than 100 employees for a firm in the manufacturing sector and 50 in the service industry, or with annual sales between $250,000 and $10 million. Other components of the program include international bid preparation (Capital Project Bidding) and, for trade associations, developing

international marketing activities for their membership. For additional information visit http://www.infoexport.gc.ca/pemd-e.asp or call 1-888-811-1119.

WIN Exports

WIN Exports, a database of Canadian exporters and their capabilities, is used by trade commissioners around the world and by Team Canada Inc partners in Canada to match Canadian suppliers with foreign business leads, and to share information on trade events. To register your company in WIN Exports or for more information, visit http://www.infoexport.gc.ca/winexports/menu-e.asp or call 1-888-811-1119.

PRIVATE-SECTOR CUSTOMERS

In China, 50% of forests are state-owned. The main forest areas are in the Northeast, Inner Mongolia and Southwest China, which are run by state forest bureaus and state-owned forest farms. The remaining 50% of forest is collectively owned and mainly located in South China. In recent years, some individuals have developed private forests through leasing woodlands. However, private forests represent a very small proportion of China's forest resources.

PUBLIC-SECTOR CUSTOMERS

Since there are very few private-sector customers in the Chinese forestry development market, for the most part, customers in this market are concentrated in the public sector.
(state owned enterprises and related institutions).

When negotiating contracts, Chinese forestry authorities pay careful attention to pricing, technology transfer, product quality and after-sales service. Financing is always an issue when doing business in China. Canadian companies able to offer attractive financing options in their proposals will have a large advantage over competitors who do not. Creativity and flexibility are essential when doing business in China.

Government Organizations

Since 1978, China has pursued a decentralization policy. As a result, the role of the Chinese central government in provincial forest affairs has decreased in the past few decades.

In 1997, China had about 136 state-administered forestry bureaus, 4256 state-owned forest farms, 2144 nurseries, 518 nature protection zones for forest and wild animals, 710 forest parks or resorts, 35 000 forest working stations and 150 000 township farms.

State Forestry Administration

The SFA is responsible for formulating state forest polices, implementing forest laws and regulations, and carrying out forest management and afforestation programs. There are forest bureaus in provincial and autonomous regional governments, and forest offices at the township and village levels.

SFA has considerably increased its internal capacity in project preparation, monitoring and evaluation. The SFA exercises strong leadership in project preparation, monitoring, evaluation, and supervision as well as in increasing the capacity of the provinces in the preparation, implementation, monitoring, and evaluation of forestry projects.

SFA has a long and successful relationship with Canada in the area of forestry projects in China. Between 1985 and 1995, three major forestry projects were successfully carried out under the umbrella of CIDA ($6-$10 million range).

Chinese Academy of Forestry

The Chinese Academy of Forestry was established in 1958 and operates as part of China's Ministry of Forestry. The Academy now comprises nine research institutes: the Research Institute of Forestry, Subtropical Forestry, Tropical Forestry, Resource Insects, Wood Industry, Chemical Processing and Utilization of Forest Products, Forestry Economics, Scientific and Technological Information on Forestry, and Forestry Resources and Information.

In addition to these institutes, the Academy also maintains a library and three forestry experimental stations, namely, the Experimental Centre of Desert Forestry, Subtropical Forestry, and Tropical Forestry. Most of these are located in Beijing, Jiangsu, Jiangxi, Zhejiang, Yunnan, Guangdong Provinces as well as Guangxi Zhuang and Inner Mongolia Autonomous Regions.

Ministry of Machinery Industry's Agricultural Machinery Corporation

The Ministry of Machinery Industry's Agricultural Machinery Corporation has overall responsibility for farm machinery sales and distribution in China through agricultural machinery industrial enterprise companies.

Government Procurement Regulations

Promotion of Foreign Investment in Forestation

The SFA recently stated that the Chinese government was working on formulating administrative rules to encourage and institutionalize foreign investment in forestation. To liberize the forestation mechanism and increase investment in forestation, the

central government has stated that it will encourage the co-development of state-owned forests, collective-owned forests and privately owned forests as well as foreign investment in forestation. Accordingly, it has been reported that about 80% of the Forestation Fund raised by the forestation administration at the national level will be put into foreign-invested forestation enterprises and private forestation projects.

Guangdong is the leading province in applying foreign investment in forestation. To date, it has put $154 million foreign investment for forestation, representing 15 times the total investment that the provincial financial department has made during the past 10 years.

World Bank

The World Bank maintains a large loan program in China, primarily in key infrastructure industries such as transportation, power, energy, agriculture, forestry and the environment. The World Bank conducts its procurement by the rules of international competitive bidding through China National Technical Import Corporation or China National Instruments Import and Export Corporation. Tender announcements are published in the China Daily (English) and People's Daily (Chinese).

MARKET LOGISTICS

Channels of Distribution

Foreign companies are not permitted to directly engage in trade in China, other than direct marketing of goods they have manufactured in China. Accordingly, Canadian exporters need to use a domestic Chinese agent or distributor for both importation into China and marketing within China. The Chinese are more likely to contact foreign companies that have an office or representative in China. Joint ventures with domestic firms, wholly owned foreign ventures, technology-transfer arrangements, trading companies, and the establishment of local sales offices are also options.

In the case of consultant/professional services, Canadian companies are strongly encourage to partner with well-established local forest management companies or consultants.

Canadian companies may contact the Canadian Embassy in Beijing or the Consulates General in Chongqing, Guangzhou and Shanghai for a list of reliable and authorized distributors and agents in their respective regions.

Market-entry Considerations

There are no specific market access issues. However, companies should be aware of the advantages of having a local partner and the importance that the Chinese government attaches to local production.

Joint Ventures

Canadian companies should be aware that forging partnerships or developing joint ventures with local Chinese companies remains the key to entering the market if a long-term commitment is the objective. The Chinese government encourages and welcomes any form of partnership — including joint ventures and technology transfers — in the forestry industry to enhance domestic capabilities.

Most large-scale, foreign forest-sector investments in China are a result of joint-venture relationships. Joint ventures afford access to a Chinese partner's established business connections, can help the exporter understand and navigate through local regulations, and can contribute to popular recognition by association with a well-known Chinese name. Canadian firms should realize, however, that joint-venture arrangements often require continuous negotiations to ensure that business plans remain acceptable to both parties.

Companies are also advised to ensure that all steps are taken to protect their product/technology against unauthorized duplication.

Chinese Government's Policy for Technology Transfer

Ever since the introduction of China's open door policy in 1979, China's trade in technology has risen significantly.

To attract foreign technology, the Government will continue to increase its contacts with foreign governments, banks, companies and institutions of higher learning. The Government will also continue to promote international co-operation in the exchange and dissemination of information pertaining to technological developments.

Over the last few years, to facilitate the flow of technology, the Chinese government has officially:

- increasingly complied with international norms and practices for protecting proprietary rights;
- encouraged the development of trade in technology in different forms. It has fostered the import of technology for designing, processing, manufacturing, and managing products as well as for promoting the export of newly developed industrial technology;

- stressed trade in technology with both developing and developed countries;
- provided funding for the import of foreign technology through domestic sources and foreign loans;
- offered preferential tax incentives for the import of selected foreign technology;
- reformed the foreign trade system so that enterprises can import foreign technology; and
- introduced laws and regulations facilitating the import of foreign technology — Patent Law, Trademark Law, Foreign Economic Contract Law, Copyright Law, and Regulations on the Administration of Technological Import Contracts.

Along with these major government projects, state and collective enterprises will also import foreign technology. The Government announcement clearly demonstrates that China is determined to modernize its technology and is committed to welcoming foreign investment.

Challenges

Some of the most important challenges facing Canadian firms in the Chinese forestry sector include:

- difficulty in finding the right local partner with adequate management and financial resources;
- a general lack of current and reliable information about domestic production, local companies and planned projects;
- the bureaucracy and regulatory changes that arrive mid-stream,
- language and culture; and
- strong competition from Pacific Rim and other surrounding countries.

Foreign companies also tend to underestimate the time and money required to get projects up and running in China.

China's Accession to the World Trade Organization

China has made a number of trade-related commitments to WTO members that are expected to take effect when China accedes to the organization. These include tariff concessions as well as commitments to apply WTO rules relating to subsidies, standards, intellectual property, import licensing, trade-related investment measures and sanitary and phytosanitary measures. China will also be bound by fundamental WTO principles that will require the country to strengthen commercial legal procedures and improve transparency.

China's WTO commitments should help to reduce the risk of doing business in China and encourage increased trade and investment flows. However, most commitments will

be phased in over time. In the case of lower tariff rates, most new bound rates will be phased in over five equal, annual increments from the date of accession.

China negotiated a number of tariff rate concessions in its bilateral WTO agreements with member countries. The most favourable concession for any item will apply to all member countries once China joins the WTO.

On November 26, 1999, Canada and China concluded a bilateral agreement providing for improved market access for a range of goods and services.

Suggested Business Practices

There exist many opportunities for Canadian forestry service providers in China, but doing business in this country must be tempered with a great deal of patience and persistence. Canadian companies must realize that the Chinese market is a very challenging one to enter, and must acquaint themselves with local business practices and import or joint-venture regulations. Companies must have the resources to enter the market, and should not underestimate the amount of market research, flexibility, and human and financial resources needed. Canadian companies are strongly advised to join delegations visiting China, and should take advantage of government contacts.

One of the most important aspects of business dealings in China is developing good connections. The right connections in China can open doors to vast networks of potential clients and can facilitate understanding (and sometimes sidestepping) of China's diverse regulations and restrictions.

Frequent visits to the market (e.g. to each local forestry bureau) by the exporter — and/or establishment of a local office — is advisable for establishing successful, long-term business relationships in China. Naturally, all training and usage documentation accompanying imported products/technology must be provided in the customer's first language. Written Chinese should be in simplified characters. Canadian companies should bring business cards that are in Chinese. The most commonly spoken Chinese is the Mandarin dialect, although Cantonese is often preferred in some Southern Chinese areas).

Reputation and reliability are extremely important in the Chinese market. Canadian companies are, therefore, advised to participate in high-profile forestry projects in order to gain exposure in the market and to build the company's reputation.

Networking with other Canadian companies with complementary services may allow for more successful, co-ordinated approaches to marketing in China.

For more exhaustive treatments of suggested business practices in China please refer to **Appendix C** and to the Department of Foreign Affairs and International Trade's *SME*

Survival Guide to the China Market, which is available at the following URL: http://www.infoexport.gc.ca/docs/view-e.asp?fn=76520&lg=0

Intellectual Property Rights Protection

Although China has indicated a strong commitment to improving property rights protection, trademark infractions and theft of patented technology is prevalent.

Patent applications by foreign firms must be made to the Patent Agency of the China Council for the Promotion of International Affairs, the Shanghai Patent Office, or the Hong Kong-based China Patent Agent. Applications and proceedings are published in the Patent Gazette 18 months after initial filing.

Trademarks are valid for 10 years from the approval date and can be renewed upon application. Foreigners must apply to the State Administration of Industry and Commerce for a trademark.

Import Regulations

China's import procedures are considered to be quite complicated. Only authorized import and export companies have the right to import goods. Thus, in order to export to China, Canadian companies have to use these firms. Though most of these organizations do not in all instances require import licenses, all imports still need to have prior approval from the Ministry of Foreign Trade and Economic Cooperation.

China officially abolished pesticide imports license regulations, according to Announcement No. 1 in 1997 issued by MOFTEC, SPC, the State Economic and Trade Commission (SETC), and the Customs General Administration. However, the Chinese Ministry of Agriculture and SPC set strict regulations on importing newer, higher-tech pesticide products. Pesticide products that have not been used before in China must be registered with the Ministry of Agriculture and tested at designated agricultural research and development centers. Proper certification of each pesticide usually takes 2-3 years.

Customs and Tariffs

In China, the Customs General Administration assesses and collects tariffs on most imported products. In addition, it collects a value-added-tax (VAT), generally equal to 17%, on imported items.

It should be noted that once China enters the WTO, duties on most fertilizers and chemical products are expected to be reduced from 6% to about 4% or less, over a period of 3 to 5 years. Other trade barriers, such as quotas on selected chemical products will also be eliminated upon accession. China's tariffs on major forestry and agricultural machinery equipment have historically been fairly high, ranging from 6% to

25%; however, the negotiations for WTO membership have resulted in the rates declining over time, with some being eliminated altogether. China will also remove many of the restrictions which currently limit foreign provision of engineering consulting services, and other professional services. Information on import tariffs and taxes can be obtained from "*Customs Import and Export Tariff of the People's Republic of China*", published by the Department of Laws and Regulations of the Customs General Administration of China.

Canadian companies should be aware that taxation matters in China tend to be inconsistently applied and are constantly changing, creating a lack of uniformity in customs valuation practices. Different ports of entry may charge significantly different duty rates on the same products. Because there is flexibility at the local level in deciding whether to charge the official rate, actual customs duties, like many taxes, are often the result of personal negotiation between business persons and Chinese Customs officers. For further information about taxation, Canadian firms should seek advice from accounting offices in Canada or China. A list of firms in China can be obtained through the Canadian Embassy in Beijing (see contacts list).

The most important issue to be considered by any Canadian firm contemplating doing business in China is that the market is still highly protected. Investment barriers include difficulty in appealing rulings via a judicial review process, difficulty in accessing foreign exchange, the lack of transparency in the Chinese regime, and the lack of uniform application of laws and regulations throughout China. Non-tariff barriers include difficulties in obtaining import licences, the existence of quotas, and the subsidization of Chinese manufacturers. The levels of specific nontariff barriers are the result of complex negotiations between the central government and various ministries, state-owned corporations and trading companies.

The approval process is also challenging, as it is often difficult to identify the ultimate decision-making authority for a particular project or product. Laws governing the industry are unclear, and the regulatory environment is constantly changing.

Import Procedures

Dealing with Chinese customs can be difficult at times. Doing business over the phone and via facsimile is still not sufficient in China. Many import procedures require personal, face-to-face communication. Hong Kong agents or distributors can save firms a great deal of time, money and worry by handling tedious import procedures for Canadian firms as Hong Kong firms often have a better understanding of the Chinese system.

Export Credit Risks, Restrictions on Letters of Credit, Currency Controls

Chinese agents and distributors are generally well-versed in the use of letters of credit and other common export financing mechanisms. Foreign companies doing business in China have also found that both public- and private-sector customers are usually diligent with issuing payment on time and according to the specifications of the agreement. Short-term credits (30-90 days) are commonly provided.

All commercial transactions involving foreign exchange payments in China must be approved by the State Administration of Exchange Control.

PROMOTIONAL EVENTS

International exhibitions held in China are good opportunities for Canadian companies to market products/expertise and to find agents and distributors. Chinese business people seldom travel abroad and frequently depend on these exhibitions to find companies interested in exporting to China.

Event/Description	Organizer
WOODMAC CHINA 2001 (Biennial) **International Forestry & Woodworking Machinery & Supplies Exhibition** February 20-23, 2001 Shanghai International Exhibition Centre	Adsale Exhibition Services Ltd. 4/F Stanhope House - 734 King's Road North Point, Hong Kong (Hong Kong) Tel.: (852) 2811-8897 Fax: (852) 2811-8897 E-mail: aes@adsaleexh.com
WOODWORK SHANGHAI (Annual) Shanghai International Woodworking Machinery Fair March 28-31, 2001 Shanghai International Exhibition Centre	As above.
THE 8TH INTERNATIONAL FURNITURE & WOODWORKING MACHINERY FAIR March 10 - 14, 2001 Shenzhen High-tech Fair Exhibition Centre Shenzhen Furniture Association	21/F She Ji Mansion - 8 Zhenhua Lu Shenzhen - China 518031 Tel.: (86) 755 3786188 Fax: (86) 755 3785652 E-mail: szszfa@public.szptt.net.cn
THE 9TH INTERNATIONAL FURNITURE & WOODWORKING MACHINERY FAIR August 16 - 20, 2001 Shenzhen High-tech Fair Exhibition Centre	Shenzhen Furniture Association 21/F She Ji Mansion - 8 Zhenhua Lu Shenzhen - China 518031 Tel.: (86) 755 3786188 Fax: (86) 755 3785652 E-mail: szszfa@public.szptt.net.cn

KEY CONTACTS AND SUPPORT SERVICES

Canadian Government Contacts

Canadian Embassy and Consulates

Canadian Embassy – Beijing
19 Dongzhimenwai Dajie
Chaoyang District
Beijing 100600 China
Tel.: (86-10) 6532-3536
Fax: (86-10) 6532-4072
Contact: Mrs. Terry Brophy, Commercial Counsellor
E-mail: terry.brophy@dfait-maeci.gc.ca
Internet: http://www.canada.org.cn

Canadian Consulate – Chongqing
Suite 1705, Metropolitan Tower
Wu Yi Lu, Yu Zhong District
Chongqing 400010 China
Tel.: (86-23) 6373-8007
Fax: (86-23) 6373-8026
Contact: Mr. Peter Liao
E-mail: peter.liao@dfait-maeci.gc.ca
Internet: http://www.canada.org.cn

Consulate General of Canada – Guangzhou
Suite 801, China Hotel Office Tower
Liu Hua Lu
Guangzhou 510015 China
Tel.: (86-20) 8666-0569
Fax: (86-20) 8667-2401
Contact: Ms. Sarah Wu, Commercial Officer
E-mail: sarah.wu@dfait-maeci.gc.ca
Internet: http://www.canada.org.cn

Consulate General of Canada – Shanghai
Tower 4, Suite 604
Shanghai Centre
1376 Nanjing Xi Lu
Shanghai 200040 China
Tel.: (86-21) 6279-8400
Fax: (86-21) 6279-8401
Contact: Mr. Thomas Chen
E-mail: thomas.chen@dfait-maeci.gc.ca
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APPENDIX A – Wood Species Distribution

Region	Common Name	Latin Name
Northeastern		
Heilongjiang	Dahurian Larch	*Larix gmelini*
Jilin	Korean Larch	*Larix olgensis*
Eastern Inner Mongolia	Korean pine	*P.koraiensis Sieb.et Zucc*
	Chinese Spruce	*Picea asperata Mast.*
	Japanese Larch	*Larxi leptolepis*
	Amur Corktree	*Phellodendron amurense*
	Manchurian Walunt	*Juglans mandrhurica*
	Shinyleaf Yellow-horn	*Xanthoceras sorbifolia*
	Simon Polar	*Populus simonii*
	Faber Fir	*Abies fabri*
	Mongolian Scotch Pine	*P.sylvestris L.var.Mongolica*
	Manchurian Ash	*Fraxinus mandshurica*
	Linden	*Tilia L.*
	Elm	*Ulmus L.*
	Mongolian Oak	*Quercus monglica Fisch.e*
	Liaodong Oak	*Quercus Liaotungensis Koidz., etc.*
Southwestern		
Sichua	Dragon Spruce	*Picea asperata*
Shanxi	Faber Fir	*Abies fabri*
Yunnan	Chinese Larch	*Larix Potaninii Batal*
Tibet	Alpine Pine	*Pinus densata Mast*
Xingjiang	Camphor	*Cinnamomum camphora(L)*
(part of) Gansu	Yunnan Pine	*Pinus yunnaneneis Franch*
	Armand or Huashan Pine	*Pinus armandi Franch*
	Arbor Vitae	*Platycladus Spach*
	Alder	*Alnus Mill*
	Bombax	*Gossampinus Bush.Ham*
	Jack-Fruit	*Artocarpus heterophyllus*
	Red Meranti, etc.	*Shorea assamica Dyer, etc.*
Southern		
Fujian	Chinese Fir	*Cunninghamia lanceolata*
Hunan	Masson Pine	*Pinus massoniana*
Hubei	Huangshan Pine	*Pinus taiwanesis*
Jiangxi	Chinese Cryptomeria	*Cryptoeria fortunei*
Zhejiang	Fukien Cypress	*Forkienia hodginsii.*
Hainan	Chinese Sapium	*Spium sebiferum(L)Roxb*
Guizhou	Maple	*Acer,L*
Guangxi	Sassfras	*Sassafras Trew.*
Guangdong	Bamboo	*Bamboo*
Sichua	Eucalyptus	*Eucalytus*
Yunnan	Oiltea Camellia, etc	*Camellia oleifera*
Southern Anhui	Camphortree	*Cirmamomum camphora*
Jiangsu	Guqer	*Schima superba*
	Tung oil tree	*Aleuriles fordii*
	Slash Pine	*Pinus elliottii*
	Metasequoia (Water Fir)	*Metasequoia glyptostroboides*

Source: China: *Forestry and the Wood Products Industry* . World Forestry Center, September 1998.

APPENDIX B – Key Forestry Projects in China

Forestry Development in Poor Areas of Central and Western China

Driven by the State Western Development Strategy, forestry development has taken a strategic position in developing West China. Protecting the natural forests, returning farmlands to woodlands, restoring vegetation and improving ecological environment have been identified has top priorities in western China. The SFA is directly in charge of the ecological environment construction in West China.

The Government of China, with the help of the World Bank is expected to start a forestry development project in poor areas of central and western China. The project, which was approved in May 1998, will support the dissemination of improved silvicultural models for timber and horticultural plantations to poor areas. It is expected that a limited number of individual consultants will be required, particularly in silvicultural management.

The main project objective is to develop forest resources on a sustainable and participatory basis to support poverty reduction, forestry development, and improved environmental management. The main forestry development objective would focus on increasing timber and horticultural production, and reducing soil erosion.

The project will:

- establish about 290 000 ha of plantations primarily for construction timber and secondarily for pulpwood and pit props on mountainous wasteland;
- establish about 225 000 ha of economic forest crops, including 110 000 ha of new and rehabilitated bamboo, and 115 000 ha of fruit, nut and medicinal trees including chestnut, walnut, ginkgo, eucommia, apple and pear;
- strengthen and build technical support/training programs for project afforestation activities; and
- raise the quality of planting materials through introduction of improved genetic materials and nursery management technologies, and support the production of the 0.8 billion seedlings required under the project.

Other concurrent key forestry programs include:

- ***National Forest Protection Project***

In line with the NEECP's objectives, the project's main goals are to preserve and protect vegetation, bring water and soil erosion under control, and improve the ecological environment in the areas of Yangtze and Yellow Rivers. As a result of the logging ban, more importance is also given to the development of timber forests.

The project covers 18 provinces, namely Yunnan, Sichuan, Chongqing, Guizhou, Shannxi, Gansu, Qinghai, Xinjiang, Inner Mongolia, Jilin, Heilongjiang, Hainan, Hunan, Hubei, Jiangxi, Henan, Shanxi, Ningxia province. The total forest area is 125.418 million hectares. It has been reported that the central and local governments will invest up to $31 billion (174.427 billion yuan) in the project. The program is being implemented from 1998 to 2010.

- ***The Three-North Shelterbelt Development Program***

The Three-North Shelterbelt Development Program, known as "China's Green Great Wall", stretches over 551 counties (banners, cities) of 13 provinces (autonomous regions, municipalities) in northeast, north and northwest China, covering a total area of 4.069 million square kilometres (42.2% of China's total land area). The program started in 1978 and is expected to be completed in 2050. A total of 35.08 million hectares of plantation are expected to be established under the program, representing the biggest ecological program in the world. By 1998, 27 million hectares of plantation had been established and the forest coverage rate increased from 5.05% to 9%.

- ***Program on Soil and Water Conservation Forest along the Upper and Middle Reaches of the Yangtze River***

With a total length of 6300 km, the Yangtze River is the longest river in China. The area and population in its drainage area account for 18.8% and 33%, respectively, of the country's total. The Master Plan — approved by the Chinese government in 1989 — for the First Phase of the Program on Soil and Water Conservation along the Upper and Middle Reaches of the Yangtze River plans to increase to 6.67 million hectares of forests by the year 2000, and 20 million hectares of forests within the next 30-40 years through afforestation and conservation of the existing forests and vegetation.

The program is actively being pursued in 271 counties of 12 provinces and municipalities, with priority given to the construction of 10 key project sites such as the projects in the Three Gorges, along the upper and middle reaches of the Jinsha and Jialing Rivers. The program, which started in 1989, has established a total of 4.57 million hectares of plantation. Consequently, water and soil erosion areas have decreased from 36.2 million hectares to 20.98 million hectares

- ***Program on Soil and Water Conservation Forest along the Upper and Middle Reaches of the Yellow River***

The program, which started in 1995, aims at adding 3.15 million hectares of forests by the year 2010, to increase the forest cover by 10%. The program is being carried out in 177 counties of six provinces. The key objectives are to increase forest coverage rate, reduce the volume of water and soil erosion, and improve the regional ecological

environment. By 1998, a total of 0.44 million hectares of forest had been developed in 73 counties.

- ***The Coastal Shelterbelt Development Program***

The Coastal Shelterbelt Development Program stretches as long as 18 000 km from the mouth of the Yalujiang River in northern China's Liaoning Province to the Beilun River in Guangxi. The Chinese government decided in 1988 to set up a shelterbelt system in 195 designated counties within 11 coastal provinces (autonomous regions, municipalities). It is expected that by 2010, the plantation area will have increased by 3.5 million hectares and the forest cover will have reached 39% (compared to 25% prior to the program). Furthermore, the project is expected to bring 7.7 million hectares of farmland under the protection of a shelterbelt, and reduce the volume of water and soil erosion by 50%.

- ***The National Program to Combat Desertification***

Deserts and desertified land caused by wind erosion covers one third of China's total land area. In 1991, the Chinese government approved the *Outline on Desertification Prevention and Control between 1991-2000*, which states that 7.2 million hectares of wind eroded and desertified land would be brought under control within 10 years. By 1998, a total of 7.4 million hectares of sandy land were reclaimed and developed while 1.04 million hectares of plantations were established. The desertification program stretches over 598 counties and 6217 villages within 27 provinces and municipalities. The current desertification efforts focus on Beijing and its surrounding areas.

- ***The Taihang Mountain Afforestation Program – Second Phase***

The Taihang Mountain Afforestation Program involves 110 counties within Shanxi, Hebei, Henan Provinces and the city of Beijing. According to the objectives set out by this program, by the year 2000, the total afforested area is expected to reach seven million hectares with a green cover of 54.4%, bringing the total forest area to 5.3 million hectares with a forest cover of 43.6%.

- ***Forestry Projects in Anhui Province***

East China's Anhui Province has attracted more than $140 million in foreign funds to develop its forest sector since 1991.

The province has 14 foreign-funded projects involving tree planting, treatment of plant diseases, fire prevention and forest industries. A major afforestation project, with $51million (289 million yuan) in investment including $25 million in loans from the World Bank, will fund the planting of trees over an area of 46 000 ha, raising the forest

coverage rate in the involved areas by 5.6%. At present, the province still expects foreign investment to be used in 15 other forestry projects.

- ***Beijing Afforestation Project***

The central government departments have allocated a total of about $20 million (120 million yuan) to help with Beijing's afforestation projects.

Beijing has begun to build a 100 km^2 forest belt around the city. According to Beijing's Municipal Afforestation Bureau, this huge afforestation project, which is to be completed by 2002, may be the biggest of its kind in the history of afforestation in the world.

- **Afforestation Project in Yangtze Jiangxi Province (1998-2002)**

In an effort to solve problems of past deforestation, soil erosion and widespread poverty in Northern Jiangxi, $0.7 million hectares been allocated for a forestry project in Poyang Lake Area, Jiangxi Province. The project aims at improving the ecological environment and forest cover, and to build up the living standard of the rural poor. Forest cover will be increased by 30 100 ha of predominately protection forest, established by following biodiversity principles.

The project is expected to seek provision of intermittent advisory services and training in China and abroad to strengthen the operating and project management capacity of the Jiangxi Forestry Department in:

- appraisal of sites and development of afforestation designs;
- afforestation techniques, forest management and forest resource use;
- soil and water conservation techniques;
- organization and operation of forestry extension service;
- financial and administrative project management;
- quality control of afforestation activities and monitoring and evaluation of afforested areas;
- monitoring of socio-economic project impact; and
- selection of equipment and vehicles; tender procedures and procurement.

Canadian companies are encouraged to contact the Canadian Embassy in Beijing, the Consulate General in Shanghai, or the Consulates in Chongqing and Guangzhou for more information on China's forestry projects.

APPENDIX C – Business Do's and Don'ts

Do:

- familiarize yourself with China's culture, politics, business and social practices;
- understand that respect — amply seasoned with a knowledge and understanding of the Chinese culture — will be a critical building block in the foundation of a commercial relationship;
- understand the full meaning of *guanxi*, as well as the Chinese philosophy of "friendship first, business second";
- enlist the assistance of the Government of Canada through its various departments, offices, Consulates General and the Canadian Embassy in Beijing;
- take advantage of Government-supported trade initiatives, e.g. Team Canada visits;
- become familiar with Canadian public policies and public- and private-sector initiatives designed to provide a competitive advantage to Canadian companies;
- be aware, if your company is an SME, that market access will likely occur more quickly if you are part of a consortium;
- note the advantages inherent in offering attractive financing options;
- become familiar with the advantages/disadvantages afforded by joint ventures with Chinese companies. Wholly owned foreign companies, technology transfer arrangements, trading companies and establishment of local sales offices are also options that require examination;
- recognize the value of early and frequent visits to project sites to meet key contacts and maintain relationships;
- adopt visible marketing and promotion tools — in the appropriate form of Chinese — that inform potential customers of who you are, what you do and how to contact you;
- be aware that thoughtful, targeted marketing can result in your product becoming the "preferred" one;
- note that for most large procurements, pre-qualification of your product will likely be necessary;
- be aware of the increased (spin-off) commercial opportunities that can develop as a result of establishing a presence in China, practising *guanxi*, and expanding your circle of business associates;
- have your agent or advisor research relevant aspects of the opportunity and establish contact with key officials at the project management as well as municipal, provincial and central government levels;
- allow your agent or advisor to advise you on, and facilitate, meetings and subsequent negotiations;

- instruct your agent or advisor to keep you apprized of the trading practices in China of other foreign exporters; and

- recognize that major contracts are often lost over minor misunderstandings. Rely on your agent's or advisor's knowledge and never "infer" or "assume" what terms mean or what type of response is required to a communication.

Do Not:

- visit China on a speculative, unassisted basis;

- compete with low-tech domestic airport equipment manufacturers; and

- assume that corrupt officials control regional markets because new laws are not being policed. New laws are not implemented overnight but the changes *are* being made!

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"Guangdong Takes Action to Protect Forest (August 18, 2000)," downloaded from People's Daily Online at **http://english.peopledaily.com.cn/200008/18/eng20000818_48508.html** on September 13, 2000.

"Insect Attacks on China's Forest Spreading (August 29, 2000)," downloaded from People's Daily Online at **http://english.peopledaily.com.cn/200008/29/eng20000829_49210.html** on September 13, 2000.

Memorandum of understanding between Natural Resources Canada and The State Forestry Administration of the People's Republic of China on co-operation in the field of forestry," downloaded from **http://www.infoexport.gc.ca/docs/view-e.asp?did=1158&gid=245** on September 7, 2000.

Mission: China, downloaded from NRCan: **http://nrcan.gc.ca:80/cfs/solutions/winter00/p8b.html** on September 7, 2000.

"Xinjiang Issues Preferential Policies for Foreign Investment (September 1 st, 2000)," downloaded from People's Daily Online at **http://english.peopledaily.com.cn/200009/01/eng20000901_49533.html** on September 13, 2000.

Yongsheng, Du. "Forest Fire Management in China," downloaded from Bombardier Aerospace: **http://www.aeronautique.bombardier.com/htmen/C 6_5C.htm** on September 13, 2000.

OTHER REFERENCE MATERIAL

CHINA WOOD INDUSTRY
National leading magazine on Chinese wood industry
Six issues per year
Chinese Academy of Forestry
Box 29
Wan Shou Shan
Beijing 100091 China
Tel.: (86-10) 6288-9419/16
Fax: (86-10) 6288-9416 or -1937
E-mail:cwijiang@wood.forestry.ac.cn

Useful Internet Sites

About China: **http://www.china.org.cn/English**

Academy of Western Region Development (in Chengdu): **http://www.westdevelopment.com**

Asia Pacific Foundation: **http://www.apfnet.org**

Business Development Bank of Canada: **http://www.bdc.ca**

Canada's Window on China: **http://www.canada.org.cn**

Canadian Embassy, Beijing. "China-Hong Kong Factbook: Business Protocol in China":
http://www.canada.org.hk/english/index.html

China Association of Environmental Protection Industry: **www.cepi.com.cn**

China and the WTO: **http://www.chin acanada.com/NL-Nov-99.htm**

China Council for the Promotion of International Trade (CCPIT): **http://www.ccpit.org** (information on regulations, tariffs, business environment and much more.)

China Daily: **http://www.chinadaily.com**

China Economy: **http://chinaeco.com/index.htm**

China Perspectives: **http://www.dfait-maeci.gc.ca/china**

Chinese Academy of Forestry: **http://www.forestry.ac.cn**

Department of Foreign Affairs and International Trade, IFI NET: **http://www.dfait-maeci.gc.ca/ifinet**

In-depth information about China's law and legal systems: **http://www.qis.net/chinalaw**

InfoExport: **http://www.infoexport.gc.ca**

Market Prospect: **http://www.infoexport.gc.ca/main-e.asp?act=9&sid=584&oid=245&cid=15**

MOU Between NRCan and SFA on cooperation in the field of forestry:
http://www.dfait-maeci.gc.ca/geo//html_documents/76526-e.htm

Research Institute for Scientific and Technological Information on Forestry:
http://www.forestry.ac.cn/ kxs/new/kxsy.html

State Environmental Protection Administration: **www.sepaeic.gov.cn**

READER EVALUATION

Please help the Market Research Centre to produce market reports that meet your information needs by completing this evaluation form and returning it by fax to (613) 943-1103. Thank you for your valuable input.

1. How did you obtain a copy of this market report?
   - ☐ InfoCentre FaxLink system
   - ☐ InfoCentre help line
   - ☐ Local government office
   - ☐ Government Internet site
   - ☐ Other: _____

2. How would you describe this market report?

	Strongly agree	Agree	No opinion	Disagree	Strongly disagree
Useful	☐	☐	☐	☐	☐
Complete	☐	☐	☐	☐	☐
Well organized	☐	☐	☐	☐	☐
Well written	☐	☐	☐	☐	☐
Ideal length	☐	☐	☐	☐	☐

3. In what form do you prefer to obtain these reports?
   - ☐ Print
   - ☐ Electronic

4. Based on the information in this report, what specific action(s) does your organization plan to take in this market? Check all that apply.
   - ☐ Seek an agent/distributor
   - ☐ Visit the market
   - ☐ Do more research
   - ☐ Other: _____
   - ☐ Contact Canadian trade office abroad
   - ☐ Participate in a trade show abroad
   - ☐ Nothing

5. What other market reports would be of benefit to your organization? Please identify specific products and countries. _____

6. Which of the following categories best describes your organization? Check one only.
   - ☐ Processor/manufacturer
   - ☐ Trading house
   - ☐ Export service provider
   - ☐ Industry/trade association
   - ☐ Government
   - ☐ Student/academia
   - ☐ Consultant
   - ☐ Other: _____

7. What were your organization's total sales last year, in Canadian dollars?
   - ☐ Less than $10 million
   - ☐ More than $50 million
   - ☐ $10 million to $50 million
   - ☐ Not applicable

Additional comments/suggestions for improvement: _____

OPTIONAL — The name of your organization is: _____